



U.S. Department
of Transportation

**Pipeline and
Hazardous
Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 30 2005

DOT-E 13896
(FIRST REVISION)

EXPIRATION DATE: January 31, 2007

(FOR RENEWAL, SEE 49 CFR § 107.109).

1. GRANTEE: FIBA Technologies, Inc., (FIBA)
Westboro, MA
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of certain DOT 3 series specification cylinders, which have been re-threaded during requalification, for the compressed gases described in paragraph 6 below. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use or other uses not associated with transportation in commerce.
 - c. Party status will not be granted to this exemption.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 180.205(d) in that a DOT 3 series specification cylinder may not be re-threaded except as specified herein.

NOTE: This does not relieve the holder of this exemption from securing and maintaining a valid approval for the repair of cylinders from the Associate Administrator for Hazardous Materials Safety.

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5. BASIS: This exemption is based on the application of FIBA dated September 16, 2004 submitted in accordance with § 107.105 and the public proceeding thereon. Additional information dated March 10, 2005 was also submitted.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identifi- cation Number	Packing Group
The appropriate proper shipping name listed in § 172.101/ Liquefied or nonliquefied compressed gases, or mixtures of such compressed gases which are authorized in the Hazardous Materials Regulations for transportation in DOT 3A, 3AA, 3AX, 3AAX and 3T cylinders.	2.1, 2.2 or 2.3 as applicable	As Appropriate	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

(1) Packagings prescribed are seamless DOT-3 series specification cylinders having straight threads. Each cylinder must be successfully retested, reinspected, and marked by FIBA as required in § 180.205 following any repair. The re-threading must be performed in accordance with the procedure described in FIBA application, dated September 2004, on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and the following:

(i) External re-threading of long cylinders (tubes) - The external neck threads must be examined to determine if adequate material is present before machining is initiated. The tube necks thickness must be measured using a scissors gauge accurate to +/- 0.002". The critical location is in the neck-to-dome transition radius area.

(A) At least four thickness measurements spaced 90 degrees apart must be taken at the critical location (neck-to-dome transition radius area).

(B) The neck thickness measurements must be taken and reported before and after re-threading.

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(C) Upon completion of the re-threading operation, the threads shall be gauged in accordance with Federal Standard, NSB H-28.

(ii) Internal re-threading of cylinder - the internal neck threads must be examined to determine if adequate shearing strength is present before machining is initiated. The cylinder internal neck threads must be measured using a caliper gauge accurate to ± 0.002 ".

(A) At least four measurements spaced 90 degrees apart must be taken approximately middle of the threaded neck to determine the internal diameter of the cylinder neck at the critical location (root of each thread).

(B) The measurements must be taken and reported before and after re-threading.

(C) Upon completion of the re-threading operation, the threads shall be gauged in accordance with Federal Standard, NSB H-28.

b. OPERATIONAL CONTROLS -

(1) Upon completion of a cylinder neck re-thread, the threaded neck must be inspected by an approved Independent Inspection Agency (IIA) who must verify the threads are in conformance with the thread gauge Federal Standard, NBS H-28.

(2) For external neck re-threading, the minimum wall thickness must be calculated for total weight of the tube and to ensure the present of an adequate strength until the next requalification period. The minimum wall thickness calculation must include corrosion allowance and normal vibration that applies during transportation.

(3) For internal neck re-threading, the shear strength must be calculated to ensure a value equal or greater than 10 times the test pressure of the cylinder.

(4) No cylinder may be re-threaded more than one time.

(5) No person may re-thread a cylinder subject to this exemption unless:

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(i) that person is an employee of FIBA and has a current copy of this exemption at the location of re-threading operation, and

(ii) complies with all the terms and conditions of this exemption.

c. Marking - Only cylinders that have been successfully retested and re-threaded by FIBA, including successful verification by an approved IIA, may be used under this exemption. Cylinders passing the prescribed tests and procedures under this exemption must be marked, in addition to the requirements of § 180.213, "RETHREAD" along with the approved Independent Inspector's mark by stamping into the shoulder near the FIBA retest marks.

d. Recordkeeping -

(1) In addition to the recordkeeping requirements of § 180.215 for retesting cylinders, FIBA must maintain records for each re-threaded cylinder under this exemption. The cylinder retest records, for each day of re-threading, must bear a certification from the approved IIA for the cylinders that have successfully passed the prescribed inspection and verification requirements of paragraph 7 this exemption.

(2) The total number of cylinders re-threaded under this exemption must be reported to OHMEA by cylinder specification and age. These results must be summarized and reported on an annual basis. If the cylinders are requalified by AE/UE or 100% UE under the terms of a separate exemption granted to FIBA, the re-threaded cylinders may be included in the same report provided they are clearly identified and grouped as having been re-threaded.

8. SPECIAL PROVISIONS:

a. Offerors may use the cylinders specified and tested in accordance with the provisions of this exemption for the transportation in commerce of those hazardous materials specified herein, provided no modifications or changes are made to the cylinders, and all terms of this exemption are complied with.

b. Shippers using the cylinders covered by this exemption must comply with the provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 100-185.

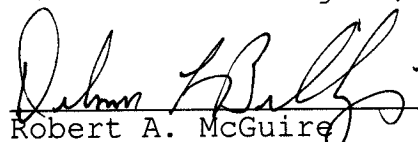
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only and passenger-carrying aircraft, as currently authorized by the regulations for the hazardous materials being transported.
10. MODAL REQUIREMENTS: None, other than as required by the HMR.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this exemption must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

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Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions>
Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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